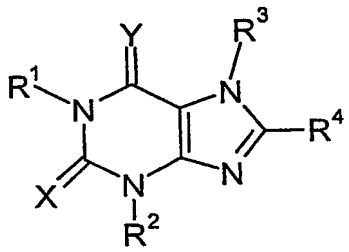
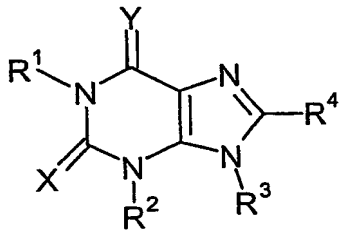
Claims

1. Use of a compound of formula (Ia) or (Ib)



(Ia)

or



(Ib)

wherein:

one of X and Y represents S, and the other represents O or S;

R^1 represents hydrogen or C1 to 6 alkyl;

R^2 represents hydrogen or C1 to 6 alkyl; said alkyl group being optionally substituted by:

i) a saturated or partially unsaturated 3- to 7-membered ring optionally incorporating one or two heteroatoms selected independently from O, N and S, and optionally incorporating a carbonyl group; said ring being optionally substituted by one or more substituents selected from halogen, hydroxy, C1 to 6 alkoxy and C1 to 6 alkyl; said alkyl being optionally further substituted by hydroxy or C1 to 6 alkoxy; or

ii) C1 to 6 alkoxy; or

iii) an aromatic ring selected from phenyl, furyl or thienyl; said aromatic ring being optionally further substituted by halogen, C1 to 6 alkyl or C1 to 6 alkoxy;

R^3 and R^4 independently represent hydrogen or C1 to 6 alkyl;

or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament, for the treatment or prophylaxis of diseases or conditions in which inhibition of the enzyme MPO is beneficial.

2. The use according to Claim 1 wherein the disease or condition is a neuroinflammatory disorder.

3. The use according to Claim 1 or Claim 2 wherein X represents S and Y represents O.

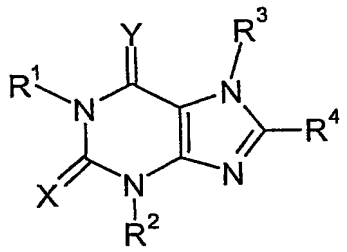
4. The use according to any one of Claims 1 to 3 wherein R^3 represents H.

5. The use according to any one of Claims 1 to 4 wherein R^2 represents optionally substituted C1 to 6 alkyl.

6. The use according to any one of Claims 1 to 5 wherein R^4 represents H.

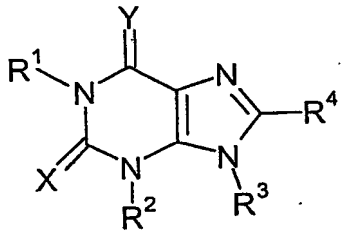
7. A pharmaceutical formulation comprising a therapeutically effective amount of a compound of formula (Ia) or (Ib), according to Claim 1, or a pharmaceutically acceptable salt thereof, in admixture with a pharmaceutically acceptable adjuvant, diluent or carrier, for use in the treatment or prophylaxis of neuroinflammatory disorders.

8. A compound of formula (Ia) or (Ib)



(Ia)

or



(Ib)

wherein:

X represents S, and Y represents O;

R^1 represents hydrogen or C1 to 6 alkyl;

R^2 represents C1 to 6 alkyl substituted by a saturated or partially unsaturated 3- to 7-membered ring optionally incorporating one or two heteroatoms selected independently from O, N and S, and optionally incorporating a carbonyl group; said ring being optionally

substituted by one or more substituents selected from halogen, hydroxy, C1 to 6 alkoxy and C1 to 6 alkyl; said alkyl being optionally further substituted by hydroxy or C1 to 6 alkoxy;

R^3 and R^4 independently represent hydrogen or C1 to 6 alkyl;

or pharmaceutically acceptable salts thereof.

9. A compound of formula (Ia) or (Ib) which is:

1,3-diisobutyl-8-methyl-6-thioxanthine;

1,3-dibutyl-8-methyl-6-thioxanthine;

3-isobutyl-1,8-dimethyl-6-thioxanthine;

3-(2-methylbutyl)-6-thioxanthine;

3-isobutyl-8-methyl-6-thioxanthine;

3-isobutyl-2-thioxanthine;

3-isobutyl-2,6-dithioxanthine;

3-isobutyl-8-methyl-2-thioxanthine;

3-isobutyl-7-methyl-2-thioxanthine;

3-cyclohexylmethyl-2-thioxanthine;

3-(3-methoxypropyl)-2-thioxanthine;

3-cyclopropylmethyl-2-thioxanthine;

3-isobutyl-1-methyl-2-thioxanthine;

3-(2-tetrahydrofuryl-methyl)-2-thioxanthine;

3-(2-methoxy-ethyl)-2-thioxanthine;

3-(3-(1-morpholinyl)-propyl)-2-thioxanthine;

3-(2-furyl-methyl)-2-thioxanthine;

3-(4-methoxybenzyl)-2-thioxanthine;

3-(4-fluorobenzyl)-2-thioxanthine;

3-phenethyl-2-thioxanthine;

(+)-3-(2-tetrahydrofuryl-methyl)-2-thioxanthine;

(-)-3-(2-tetrahydrofuryl-methyl)-2-thioxanthine;

3-n-butyl-2-thioxanthine;

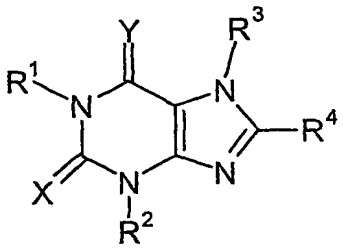
or a pharmaceutically acceptable salt thereof.

10. The use of a compound according to Claim 8 or Claim 9 as a medicament.

11. A pharmaceutical composition comprising a compound of formula (Ia) or (Ib) according to Claim 8 or Claim 9, or a pharmaceutically acceptable salt thereof, in admixture with a pharmaceutically acceptable adjuvant, diluent or carrier.

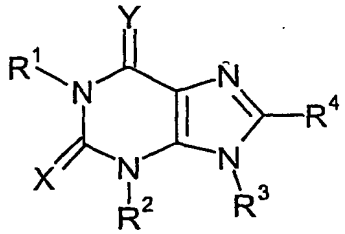
12. A process for the preparation of a compound of formula (Ia) or (Ib), as defined in Claim 8 or in Claim 9, or a pharmaceutically acceptable salt, enantiomer, diastereomer or racemate thereof, wherein the process comprises:

(a) reaction of a compound of formula (IIa) or (IIb)



(IIa)

or

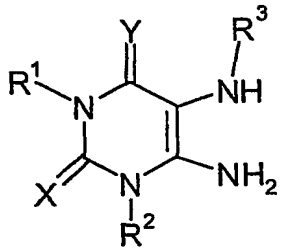


(IIb)

wherein R^1, R^2, R^3 and R^4 are as defined in Claim 1; X represents O or S; and Y represents O;

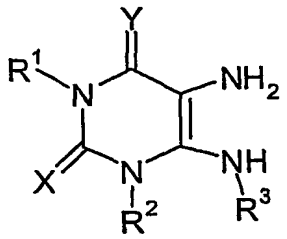
with a sulphurising compound such as Lawesson's reagent or phosphorus pentasulphide; to give a corresponding compound wherein Y represents S; or

(b) reaction of a diamine of formula (IIIa) or (IIIb)



(IIIa)

or



(IIIb)

wherein R^1, R^2, R^3, X and Y are as defined in Claim 1;

with formic acid or with a trialkylorthoester;

and where necessary converting the resultant compound of formula (Ia) or (Ib), or another salt thereof, into a pharmaceutically acceptable salt thereof; or converting the resultant compound of formula (Ia) or (Ib) into a further compound of formula (Ia) or (Ib); and where desired converting the resultant compound of formula (Ia) or (Ib) into an optical isomer thereof.